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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,199	10/26/2001	Michael S. Foster	030048019US1	9867

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EXAMINER

FOX, JAMAL A

ART UNIT	PAPER NUMBER
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2664

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/062,199

Applicant(s)

FOSTER ET AL.

Examiner

Jamal A. Fox

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-21, 24-33, 36-45 and 48 is/are rejected.
- 7) ☒ Claim(s) 10, 11, 22, 23, 34, 35, 46 and 47 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/19/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9, 12-21, 24-33, 36-45 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Hemmady et al. (U.S. Patent No. 4,872,160).

Referring to claim 1, Hemmady et al. discloses a method in a switch (switch, col. 2 lines 52-68, col. 3 lines 8-29 and col. 4 lines 50-62) for identifying destination ports (destination port, col. 17 lines 50-60, col. 47 line 65-col. 48 line 9 and col. 62 lines 35-40) for communications, the method comprising:

receiving a first communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) having a virtual address (virtual address, col. 54 lines 53-68);

identifying a first destination port (destination port, col. 17 lines 50-52) for the virtual address (virtual address, col. 54 lines 53-68) from a mapping (mapping, col. 48 lines 5-10) that maps virtual addresses (virtual address, col. 54 lines 53-68) to destination ports (destination port, col. 48 lines 5-10);

transmitting the first communication via the identified first destination port (destination port, col. 17 lines 50-52); and

after transmitting the first communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10),

receiving an indication to map the virtual address (virtual address, col. 54 lines 53-68) to a second destination port (destination port, col. 17 lines 52-54);

receiving a second communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) having the virtual address (virtual address, col. 54 lines 53-68);

identifying the second destination port (destination port, col. 17 lines 52-54) for the virtual address (virtual address, col. 54 lines 53-68) from the mapping (mapping, col. 48 lines 5-10); and transmitting the second communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) via the identified second destination port (destination port, col. 17 lines 52-54) wherein communications (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) to the same virtual address (virtual address, col. 54 lines 53-68) are transmitted via different destination ports without modifying the virtual address (virtual address, col. 54 lines 53-68).

Referring to claim 2, Hemmady et al. discloses the method of claim 1 wherein the first communication and the second communication are transmitted from the same source (CPU, col. 54 lines 45-68 and col. 55 lines 4-20).

Referring to claim 3, Hemmady et al. discloses the method of claim 1 wherein the first communication and the second communication are transmitted to the same destination node (see Figures 17 and 18 and respective portions of the spec.).

Referring to claim 4, Hemmady et al. discloses the method of claim 1 wherein the first and the second communication are transmitted to different destination nodes (see Figures 17 and 18 and respective portions of the spec.).

Referring to claim 5, Hemmady et al. discloses the method of claim 1 wherein the switch is in a network of switches and the virtual address identifies a path (path, col. 14 lines 20-25 and col. 15 lines 48-60) from a source node to a destination node within the network.

Referring to claim 6, Hemmady et al. discloses the method of claim 1 wherein the first communication and the second communication are received via the same source port (source port, col. 48 lines 9-16 and col. 62 lines 35-40) of the switch.

Referring to claim 7, Hemmady et al. discloses the method of claim 6 wherein each source port of the switch has its own mapping (mapping, col. 48 lines 5-10) of virtual addresses to destination ports (destination port, col. 48 lines 5-10).

Referring to claim 8, Hemmady et al. discloses the method of claim 1 wherein a source node that transmits the first communication and the second communication is not aware that the virtual address is mapped to the second destination port (port inactive, col. 17 lines 55-60).

Referring to claim 9, Hemmady et al. discloses the method of claim 1 wherein a virtual address is mapped (mapping, col. 48 lines 5-10) to multiple destination ports (destination port, col. 48 lines 5-10) and wherein communications are transmitted via each mapped-to destination port.

Referring to claim 12, Hemmady et al. discloses the method of claim 1 wherein the switch is an interconnect (interconnecting, col. 2 lines 35-40, interconnects, col. 4 lines, 40-45) fabric (fabric, col. 10 lines 34-40, col. 12 lines 60-63, col. 18 lines 35-40) module.

Referring to claim 13, Hemmady et al. discloses a switch (switch, col. 2 lines 52-68, col. 3 lines 8-29 and col. 4 lines 50-62) for transmitting via destination ports (destination port, col. 17 lines 50-60, col. 47 line 65-col. 48 line 9 and col. 62 lines 35-40) communications received via source ports (source port, col. 17 lines 50-55, col. 48 lines 9-15 and col. 62 lines 35-40) comprising:

a mapping (mapping, col. 48 lines 5-10) that maps virtual addresses (virtual address, col. 54 lines 53-68) to destination ports (destination port, col. 17 lines 50-60, col. 47 line 65-col. 48 line 9 and col. 62 lines 35-40);

a component that receives via a source port (source port, col. 17 lines 50-55, col. 48 lines 9-15 and col. 62 lines 35-40) a communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) with a virtual address (virtual address, col. 54 lines 53-68), that identifies a destination port (destination port, col. 17 lines 50-52) for the virtual address (virtual address, col. 54 lines 53-68) based on the mapping (mapping, col. 48 lines 5-10), and that transmits the communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) via the identified destination port (destination port, col. 17 lines 50-52); and a component that changes the mapping (mapping, col. 48 lines 5-10) to map the virtual address (virtual address, col. 54 lines 53-68) to another destination port (destination port, col. 17 lines 52-54) so that when another communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) is received with the virtual address (virtual address, col. 54 lines 53-68), it is transmitted via the other destination port (destination port, col. 17 lines 52-54).

Referring to claim 14, Hemmady et al. discloses the switch of claim 13 wherein the communications are transmitted from the same source (CPU, col. 54 lines 45-68 and col. 55 lines 4-20).

Referring to claim 15, Hemmady et al. discloses the switch of claim 13 wherein the communications are transmitted to the same destination node (see Figures 17 and 18 and respective portions of the spec.).

Referring to claim 16, Hemmady et al. discloses the switch of claim 13, wherein the communications are transmitted to different destination nodes (see Figures 17 and 18 and respective portions of the spec.).

Referring to claim 17, Hemmady et al. discloses the switch of claim 13 wherein the switch is in a network of switches and the virtual address identifies a path (path, col. 14 lines 20-25 and col. 15 lines 48-60) from a source node to a destination node within the network.

Referring to claim 18, Hemmady et al. discloses the switch of claim 13 wherein the communications are received via the same source port (source port, col. 48 lines 9-16 and col. 62 lines 35-40) of the switch.

Referring to claim 19, Hemmady et al. discloses the switch of claim 18 wherein each source port of the switch has its own mapping (mapping, col. 48 lines 5-10) addresses to destination ports (destination port, col. 48 lines 5-10).

Referring to claim 20, Hemmady et al. discloses the switch of claim 13 wherein a source node that transmits the communications is not aware that the virtual address is mapped to the another destination port (port inactive, col. 17 lines 55-60).

Referring to claim 21, Hemmady et al. discloses the switch of claim 13 wherein a virtual address is mapped (mapping, col. 48 lines 5-10) to multiple destination ports (destination port, col. 48 lines 5-10) and wherein communications are transmitted via each mapped-to destination port.

Referring to claim 24, Hemmady et al. discloses the switch of claim 13 wherein the switch is an interconnect (interconnecting, col. 2 lines 35-40, interconnects, col. 4 lines, 40-45) fabric (fabric, col. 10 lines 34-40, col. 12 lines 60-63, col. 18 lines 35-40) module.

Referring to claim 25, Hemmady et al. discloses a method in a switch (switch, col. 2 lines 52-68, col. 3 lines 8-29 and col. 4 lines 50-62) for transmitting communications (communicate, col. 54 lines 54-56 and col. 55 lines 5-10), the method comprising:

receiving an indication to map (mapping, col. 48 lines 5-10) a virtual address (virtual address, col. 54 lines 53-68) to a destination port (destination port, col. 17 lines 50-52) of the switch;

receiving a communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) having a virtual address (virtual address, col. 54 lines 53-68) and transmitting the communications (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) via the destination port (destination port, col. 17 lines 50-52);

after transmitting the communications (communicate, col. 54 lines 54-56 and col. 55 lines 5-10),



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receiving an indication to map the virtual address (virtual address, col. 54 lines 53-68) to another destination port (destination port, col. 17 lines 52-54) of the switch;  
receiving other communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) having the virtual address (virtual address, col. 54 lines 53-68) and  
transmitting the other via the other destination port (destination port, col. 17 lines 52-54)  
wherein the virtual address (virtual address, col. 54 lines 53-68) identifies a path  
through a network (network, Fig. 7 and col. 22 lines 50-62) of switches.

Referring to claim 26, Hemmady et al. discloses the method of claim 25 wherein  
the communications are transmitted from the same source (CPU, col. 54 lines 45-68  
and col. 55 lines 4-20).

Referring to claim 27, Hemmady et al. discloses the method of claim 25 wherein  
the communications are transmitted to the same destination node (see Figures 17 and  
18 and respective portions of the spec.).

Referring to claim 28, Hemmady et al. discloses the method of claim 25 wherein  
the communications are transmitted to different destination nodes (see Figures 17 and  
18 and respective portions of the spec.).

Referring to claim 29, Hemmady et al. discloses the method of claim 25 wherein  
the switch is in a network of switches and the virtual address identifies a path (path, col.  
14 lines 20-25 and col. 15 lines 48-60) from a source node to a destination node within  
the network.

Referring to claim 30, Hemmady et al. discloses the method of claim 25 wherein the communications are received via the same source port (source port, col. 48 lines 9-16 and col. 62 lines 35-40) of the switch.

Referring to claim 31, Hemmady et al. discloses the method of claim 30 wherein each source port of the switch has its own mapping (mapping, col. 48 lines 5-10) of virtual addresses to destination ports (destination port, col. 48 lines 5-10).

Referring to claim 32, Hemmady et al. discloses the method of claim 25 wherein a source node that transmits the communications is not aware that the virtual address is mapped to the second destination port (port inactive, col. 17 lines 55-60).

Referring to claim 33, Hemmady et al. discloses the method of claim 25 wherein a virtual address is mapped (mapping, col. 48 lines 5-10) to multiple destination ports (destination port, col. 48 lines 5-10) and wherein communications are transmitted via each mapped-to destination port.

Referring to claim 36, Hemmady et al. discloses the method of claim 25 wherein the switch is an interconnect (interconnecting, col. 2 lines 35-40, interconnects, col. 4 lines, 40-45) fabric (fabric, col. 10 lines 34-40, col. 12 lines 60-63, col. 18 lines 35-40) module.

Referring to claim 37, Hemmady et al. discloses a routing device for transmitting via destination ports communications (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) received via source ports (source port, col. 17 lines 50-55, col. 48 lines 9-15 and col. 62 lines 35-40), comprising:

mapping (mapping, col. 48 lines 5-10) means for mapping virtual address (virtual address, col. 54 lines 53-68) to destination ports;

means for receiving via a source port (source port, col. 17 lines 50-55, col. 48 lines 9-15 and col. 62 lines 35-40) a communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) with a virtual address (virtual address, col. 54 lines 53-68) and for transmitting the communications (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) via a destination port (destination port, col. 17 lines 50-52) to which the virtual address (virtual address, col. 54 lines 53-68) maps; and means for changing the mapping (mapping, col. 48 lines 5-10) to map the virtual address (virtual address, col. 54 lines 53-68) to another destination port (destination port, col. 17 lines 52-54) so that when another communication (communicate, col. 54 lines 54-56 and col. 55 lines 5-10) is received with the virtual address (virtual address, col. 54 lines 53-68), it is transmitted via the other destination port (destination port, col. 17 lines 52-54).

Referring to claim 38, Hemmady et al. discloses the routing device of claim 37 wherein the communications are transmitted from the same source (CPU, col. 54 lines 45-68 and col. 55 lines 4-20).

Referring to claim 39, Hemmady et al. discloses the routing device of claim 37 wherein the communications are transmitted to the same destination node (see Figures 17 and 18 and respective portions of the spec.).

Referring to claim 40, Hemmady et al. discloses the routing device of claim 37 wherein the communications are transmitted to different destination nodes (see Figures 17 and 18 and respective portions of the spec.).

Referring to claim 41, Hemmady et al. discloses the routing device of claim 37 wherein the routing device is in a network of routing devices and the virtual address identifies a path (path, col. 14 lines 20-25 and col. 15 lines 48-60) from a source node to a destination node within the network.

Referring to claim 42, Hemmady et al. discloses the routing device of claim 37 wherein the communications are received via the same source port (source port, col. 48 lines 9-16 and col. 62 lines 35-40) of the routing device.

Referring to claim 43, Hemmady et al. discloses the routing device of claim 42 wherein each source port of the routing device has its own mapping (mapping, col. 48 lines 5-10) of virtual addresses to destination ports (destination port, col. 48 lines 5-10).

Referring to claim 44, Hemmady et al. discloses the routing device of claim 37 wherein a source node that transmits the communications is not aware that the virtual address is mapped to the another destination port (port inactive, col. 17 lines 55-60).

Referring to claim 45, Hemmady et al. discloses the routing device of claim 37 wherein a virtual address is mapped (mapping, col. 48 lines 5-10) to multiple destination ports (destination port, col. 48 lines 5-10) and wherein communications are transmitted via each mapped-to destination port.

Referring to claim 48, Hemmady et al. discloses the routing device of claim 13 wherein the routing device is an interconnect (interconnecting, col. 2 lines 35-40, interconnects, col. 4 lines, 40-45) fabric (fabric, col. 10 lines 34-40, col. 12 lines 60-63, col. 18 lines 35-40) module.

***Allowable Subject Matter***

3. Claims 10, 11, 22, 23, 34, 35, 46 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

4. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(571) 273-8300, (for formal communications intended for entry)

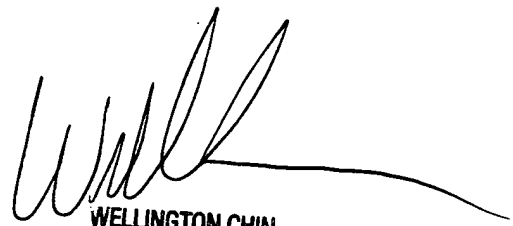
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal A. Fox whose telephone number is (571) 272-3143. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to 2600 Customer Service whose telephone number is (571) 272-2600.

A handwritten signature in black ink, appearing to read 'Jamal A. Fox', with a stylized, cursive script.

**Jamal A. Fox**



WELLINGTON CHIN  
ADVISORY PATENT EXAMINER